PATENT ABSTRACTS OF JAPAN

(11)Publication number:

2003-236708

(43)Date of publication of application: 26.08.2003

(51)Int.Cl.

B23B 27/14 C04B 35/56 C04B 35/58 C04B 35/583 C04B 41/87

(21)Application number: 2002-117577 (22)Date of filing:

19.04.2002

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(30)Priority

Priority number: 2001377381

Priority date: 11.12.2001

Priority country: JP

(54) CUTTING TIP MADE OF CUBIC CRYSTAL BORON NITRIDE GROUP ULTRAHIGH PRESSURE SINTERED MATERIAL HAVING EXCELLENT RESISTANCE TO CHIPPING

(57) Abstract:

PROBLEM TO BE SOLVED: To provide a cutting tip made of a cubic crystal boron nitride group ultrahigh pressure sintered material having excellent resistance to chipping.

SOLUTION: This cutting tip made of the cubic crystal boron nitride group ultrahigh pressure sintered material is made of the cubic crystal boron nitride group ultrahigh pressure sintered material which is a sintered body of press molding having a blending composition composed of two kinds or more of titanium nitride, titanium carbonitride, and titanium carbide or titanium carbonitride as a connection phase formation component of 15 to 45% by mass % which show three phase texture of a connection phase, a dispersed phase, and an intermediate close adhesion phase provided between cubic crystal boron nitride constituting the dispersed phase and the connection phase substantially by observation of texture using a scanning type electronic microscope, an intermetallic compound of Ti and Al as an intermediate close adhesion phase formation component of 2 to 12%, tungusten carbide of 2 to 10%, aluminum oxide as a dispersed phase formation component of 2 to 12%, and cubic crystal boron nitride of remaining parts (containing 40 to 65%).

LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of

rejection

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration1

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection] [Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]